Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
	)	
Petition of the National Telecommunications and Information Administration for Rulemaking Regarding the Use of Maritime VHF Channels 87B and 88B	)	DA 03-3585; RM-10821

To: Wireless Telecommunications Bureau
Public Safety and Private Wireless Division

COMMENTS

Pursuant to Sections 1.49 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.49 and 1.419, Lockheed Martin Corporation, on behalf of one of its business units, Lockheed Martin Maritime Systems and Sensors, Radar Systems based in Syracuse, New York ("LM-MS2"), hereby submits comments in support of the Petition for Rulemaking submitted October 4, 2003 by the National Telecommunications and Information Administration ("NTIA") regarding the use of maritime VHF channels 87B and 88B (hereinafter the "NTIA Petition").[1] As explained herein, granting the NTIA Petition will facilitate use of channels 87B and 88B in the U.S. that is consistent with the designation in the international table of allocations that recognizes Channels

[1] Wireless Telecommunications Bureau Seeks Comment On Maritel, Inc. Petition For Declaratory Ruling And National Telecommunications And Information Administration Petition For Rulemaking Regarding The Use Of Maritime VHF Channels 87B and 88B, Public Notice, DA 03-3585 (rel. Nov. 7, 2003).

87B and 88B for the Automatic Identification System ("AIS")[2] which in turn will ensure maritime safety and homeland security needs are met in the U.S. and abroad.

I. INTRODUCTION

On October 24, 2003, the NTIA filed a petition for rulemaking urging the Commission to work with NTIA to allocate VHF Channels 87B and 88B exclusively for AIS use by both Federal Government and non-Federal Government users on a shared basis nationwide.[3] NTIA argues that these channels are necessary in the U.S. for AIS operations that are essential for maritime safety and homeland security.

Lockheed Martin is uniquely qualified to render comments on the issues raised in the NTIA Petition because of the extensive experience LM-MS2 has had working with AIS. As the systems integrator for the U.S. Coast Guard ("USCG")'s Ports and Waterways Safety System (the "PAWSS" program), LM-MS2 is working with the USCG to increase the maritime safety and surveillance infrastructure in various U.S. ports by installing and integrating vessel traffic management systems that contain the AIS which operates on Channels 87B and 88B. A significant percentage of the maritime traffic to and from the U.S. passes through ports installed with PAWSS. Current installations in the U.S. include New Orleans, Louisiana; Houston, Texas; Valdez, Alaska; Berwick Bay, Louisiana; and Sault Ste Marie, Michigan. We will soon complete installations in Port Arthur, Texas and the very major Port of New York and New Jersey. LM-MS2 provides similar vessel traffic management systems to numerous other

[2] As explained in more detail herein, AIS is an International Maritime Organization ("IMO")-recognized broadcast-based shipborne navigation system that serves as the foundation for the systems of Vessel Traffic Service in the U.S. operated by the United States Coast Guard. AIS facilitates the efficient exchange of data between ships and between shore stations and ships that have been fitted with appropriate equipment.

[3] Letter dated October 24, 2003 from Frederick R. Wentland, Associate Administrator, Office of Spectrum Management, NTIA to John B. Muleta, Chief, Wireless Telecommunications Bureau, RM-10821.

commercial and government customers worldwide. These vessel traffic management systems all contain the AIS which operates on Channels 87B and 88B.

In addition to its vast practical experience working with AIS as part of installing and integrating vessel traffic management systems, LM-MS2 has been an integral part of the technical and operational development of AIS. We actively participated in the work of the relevant international bodies, such as the IMO,[4] the Comite International Radio-Maritime ("CIRM"), which is the international association for maritime electronics companies (an international industry group) and the International Association of Aids to Navigation and Lighthouse Authorities ("IALA") (a non-profit technical association of national authorities, manufacturers and consultants encouraging harmonization of aids to navigation). Lockheed Martin has corresponded with almost all of the AIS technology vendors, and, in fact, has extensively evaluated AIS products in the LM-MS2 laboratory in Syracuse, NY.

Our experience with AIS here in the U.S. is complemented by our international systems integration work conducted as part of our international contracts that encompass integrating diverse systems and sensors that incorporate AIS. Our international installations such as those in the Turkish Straits, the Greek Archipelago, and the Gulf of Suez highlight the importance of adhering to the international standard of using VHF Channels 87B and 88B exclusively for AIS.

[4] The IMO is a specialized agency of the United Nations responsible for improving maritime safety.

II. GRANTING THE NTIA PETITION WILL FACILITATE USE OF CHANNELS 87B AND 88B IN THE U.S. THAT IS CONSISTENT WITH THE INTERNATIONAL STANDARD FOR THESE TWO CHANNELS THEREBY ENSURING MARITIME SAFETY AND HOMELAND SECURITY NEEDS ARE MET IN THE U.S.

We have thoroughly reviewed the NTIA petition, and based on our extensive practical and technical experience in the area of vessel traffic management, we respectfully urge the Commission to grant the NTIA Petition and allocate Channels 87B and 88B exclusively for AIS use by both Federal Government and non-Federal Government users on a shared basis nationwide. Failure to do so could have a significant adverse impact on maritime safety in the U.S.

As noted above, a key component of PAWSS and similar vessel traffic management systems is the AIS, a broadcasting system installed on a ship which automatically provides information on identity, type, position, course, speed, navigational status and other safety related information to appropriately equipped shore stations.[5] Further, AIS automatically receives comparable information from similarly fitted ships, monitors and tracks ships and exchanges data with shore-based facilities.[6] As of July, 2002, AIS is mandatory for certain classes of large ships as a result of an amendment to the International Convention for the Safety of Life at Sea ("SOLAS").[7] AIS will be fully implemented on SOLAS ships by 31 December 2004.

AIS relies heavily on the standardized use of Channels 87B and 88B for both technical and operational reasons. Because AIS on Channels 87B and 88B is rapidly becoming the de facto standard throughout the world, standardization of the frequency channels in the U.S. assures that

[5] SOLAS, Chapter V, Regulation 19, Section 2.4.5.
[6] *Id.*
[7] SOLAS was originally adopted by 147 member states impacting 98.40% (by tonnage) of the world shipping fleet. (S*ee* http://www.imo.org/Conventions/mainframe.asp.topic_id=247).

the AIS system is available and recognizable worldwide. Further, the issue of allocating Channels 87B and 88B exclusively for AIS in the U.S. has significant implications for the installation and operation of AIS throughout U.S. ports, including existing PAWSS ports. The maritime safety of these ports will suffer a significant adverse impact if the Commission does not designate Channels 87B and 88B exclusively for AIS. Without full and constant access to these channels, AIS operations could result, for example, in transiting ships disappearing from the screens of the vessel traffic management systems, as well as from the screens of the AIS receivers located on the bridges of vessels in busy waterways. Denial of the NTIA Petition would also increase the cost and lengthen the implementation schedule for future PAWSS installations. These adverse effects would be caused by the need to conduct additional analysis to assess the design impact, and change systems accordingly, for shifting AIS operations to different frequencies, at existing and new PAWSS sites. Similar delays and cost increases would also be experienced in implementation of AIS as a vital component of Maritime Domain Awareness[8] for homeland security.

[8] "Maritime Domain Awareness (MDA) is the effective knowledge of all activities and elements in the maritime domain that threaten the safety, security or environment of the United States or its citizens." *See* Marine Safety Office, Memphis, TN, United States Coast Guard, *Maritime Domain Awareness*, at http://www.uscg.mil/d8/mso/memphis/forms/brochure.doc. The objective is to employ this increased level of awareness to allow legitimate commerce to move through all U.S. Ports and waterways unimpeded while detecting and responding to suspicious activity before it can threaten our homeland.

CONCLUSION

Lockheed Martin, on behalf of LM-MS2 as a major supplier of PAWSS and other vessel traffic management systems around the world and as a member of both IALA and CIRM, believes that the international standards for AIS are a critical component supporting world-wide maritime safety. Consistent availability of unique frequency channels for AIS not only enhances that safety, but enables it to reach the greatest number of ships and ports available. This system can be optimized only by granting NTIA's Petition.

Respectfully submitted,

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Dated: December 1, 2003

CERTIFICATE OF SERVICE

I, Maria Waters, certify that on December 1, 2003, the foregoing was served on all parties listed below by hand delivery:

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